

APPENDIX A

ACRONYMS AND ABBREVIATIONS

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ACHP	Advisory Council on Historic Preservation
ARPA	Archaeological Resources Protection Act
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BMP	Best Management Practice
BWCAW	Boundary Waters Canoe Area Wilderness
BOD	Biochemical Oxygen Demand
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CCC	Civilian Conservation Corps
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CWA	Clean Water Act
DOI	Department of the Interior
EA	Environmental Assessment
EIS	Environmental Impact Statement
EJ	Environmental Justice
EO	Executive Order
ESA	Endangered Species Act
FMP	Fire Management Plan
FMO	Fire Management Officer
FMU	Fire Management Unit
FMA	Fire Management Area
FONSI	Finding of No Significant Impact
FR	Federal Register
FY	Fiscal Year
GMP	General Management Plan
ha	Hectares
HSA	Historic Sites Act
IMPROVE	Interagency Monitoring of Protected Visual Environments
INDU	Indiana Dunes National Lakeshore
km	Kilometers
m	meters
MDEQ	Michigan Department of Environmental Quality
MDNR	Michigan Department of Natural Resources
MIST	Minimum Impact Suppression Tactics
MNICS	Minnesota Incident Command System
MOA	Memorandum of Agreement
mph	Miles Per Hour
MSL	Mean Sea Level
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NAST	National Assessment Synthesis Team
NCAR	National Center for Atmospheric Research

NEPA	National Environmental Policy Act
NFDRS	National Fire Danger Rating System
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NIEHS	National Institute of Environmental Health Sciences
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
PA	Programmatic Agreement
PILT	Payment in Lieu of Taxes
P.L.	Public Law
PM	Particulate Matter
PM ₁₀	Particulate Matter smaller than 10 microns in diameter
PM _{2.5}	Particulate Matter smaller than 2.5 microns in diameter
RMP	Resources Management Plan
SHPO	State Historic Preservation Officer
SLBE	Sleeping Bear Dunes National Lakeshore
SMP	Smoke Management Plan
THPO	Tribal Historic Preservation Officer
TNC	The Nature Conservancy
TPW	Texas Parks & Wildlife
USACE	United States Army Corps of Engineers
USC	United States Code
USCB	United States Census Bureau
USEPA	United States Environmental Protection Agency
USDA	United States Department of Agriculture
USFS	United States Forest Service
USNVC	United States National Vegetation Classification
USFWS	United States Fish and Wildlife Service
VERP	Visitor Experience and Resource Protection
VUFP	Visitor Use and Facilities Plan
VOC	Volatile Organic Compound
WFU	Wildland Fire Use
WUI	Wildland Urban Interface
WUII	Wildland Urban Interface Initiative

APPENDIX B

GLOSSARY

GLOSSARY

Air Quality: The characteristics of the ambient air (all locations accessible to the general public) as indicated by concentrations of the six air pollutants for which national standards have been established, and by measurement of visibility in mandatory Federal Class I areas.

Alluvium: Material transported and deposited on land by flowing water, such as clay, silt, and sand.

Ambient Air: Any unconfined portion of the atmosphere; open air, surrounding air.

Ambient Air Quality Standards: Standards established on a State or Federal level that define the limits for airborne concentrations of designated “criteria” pollutants (e.g., nitrogen dioxide, sulfur dioxide, carbon monoxide, particulate matter, ozone, lead) to protect public health with an adequate margin of safety (primary standards) and to protect public welfare, including plant and animal life, visibility, and materials (secondary standards).

Archaeology: The scientific study, interpretation, and reconstruction of past human cultures from an anthropological perspective based on the investigation of surviving physical evidence of human activity and the reconstruction of related past environments.

Archaeological Resources: Any material of human life or activities that is at least 50 years old, and that is of archaeological interest.

Attainment Area: An area considered to have air quality as good as or better than the National Ambient Air Quality Standards as defined in the Clean Air Act. An area may be an attainment area for one pollutant and a non-attainment area for others. Attainment areas are defined using pollutant limits set by USEPA.

Backfire: A fire set along the inner edge of a fireline to consume the fuel in the path of a wildfire and/or change the direction or force of the fire’s convection column.

Best Management Practice (BMP): A practice or combination of practices chosen as the most effective, economical, and practical means of preventing or reducing the amount of pollution generated by non-point sources to a level compatible with State and local water quality goals. Selection of appropriate BMPs depends largely upon the conditions of the site, such as land use, topography, slope, water table elevation, and geology.

Boring: Refers to the use of a straight stream nozzle under high pressure during mop up phases of a fire to basically dig and mix up the hot coals along with the soil. In shallow soils this practice can literally wash the soil right off bedrock into a lake (in fact this was common practice at one time).

Burning Period: That part of each 24-hour period when fires spread most rapidly, typically from 10 AM until sundown.

Cold Trail: A method of controlling a partly dead fire edge by carefully inspecting and feeling with the hand for heat to detect any fire, digging out every live spot, and trenching any live edge.

Combustion: Burning. Many important pollutants, such as sulfur dioxide, nitrogen oxides, and particulates (PM-10) are combustion products, often products of the burning of fuels such as coal, oil, gas and wood

Coniferous: Cone-bearing tree. Examples are pines, firs, spruces, hemlocks, and cedars.

Class I Area: An area set aside under the Clean Air Act (CAA) to receive the most stringent protection from air quality degradation. Mandatory Class I Federal areas are: (1) international parks, (2) national wilderness areas which exceed 5,000 acres in size, (3) national memorial parks which exceed 5,000 acres in size, and (4) national parks which exceed 6,000 acres and were in existence prior to the 1977 CAA Amendments. The extent of a mandatory Class I Federal area includes subsequent changes in boundaries, such as park expansions.

Class II Area: A geographic area designated and protected by the Clean Air Act (CAA) but not as stringently as Class I areas. In Class II areas, ambient air quality exceeds NAAQS but tends not to be as high as in Class I areas, and a greater degree of deterioration is permitted.

Criteria air pollutants: A group of common air pollutants regulated by EPA on the basis of criteria (information on health and/or environmental effects of pollution) and for which NAAQS have been established. In general, criteria air pollutants are widely distributed over the country. They are: particulate matter (PM), carbon monoxide(CO), sulfur dioxide(SO₂), ozone(O₃), and lead.

Cultural Landscape: A geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values. There are four general kinds of cultural landscapes, not mutually exclusive: historic sites, historic designed landscape, historic vernacular landscape, and ethnographic landscape.

Cultural Resources: Any building, site, district, structure, object, data, or other material significant in history, architecture, archeology, or culture. Cultural resources include: historic properties as defined in the National Historic Preservation Act (NHPA), cultural items as defined in the Native American Graves Protection and Repatriation Act (NAGPRA), archeological resources as defined in the Archeological Resources Protection Act (ARPA), sacred sites as defined in Executive Order 13007, *Protection and Accommodation of Access To "Indian Sacred Sites,"* to which access is provided under the American Indian Religious Freedom Act (AIRFA), and collections.

Cumulative Impacts: Impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of which agency (Federal or non-Federal) or person undertakes such other actions; effects resulting from individually minor, but collectively significant, actions taking place over a period of time.

Deciduous: Shedding leaves annually. Deciduous trees tend to be broad-leaved, such as oaks, maples, birches, and aspens. However, the larch, which is a needle-bearing, coniferous tree, is also deciduous.

Demography: The statistical science dealing with the distribution, density, vital statistics, etc. of populations.

Ecotone: Zone of transition from one ecosystem, plant community or habitat to another.

Endangered Species: A species of plant or animal that is in danger of extinction throughout all or a significant portion of its range.

Ethnography: Part of the discipline of cultural anthropology concerned with the systematic description and analysis of cultural systems or lifeways, such as hunting, agriculture, fishing, other food procurement strategies, family life festivals and other religious celebrations.

Eutrophic: Nutrient-rich waters in pond, lake or river; frequently productive, sometimes low in dissolved oxygen.

Federal Land Manager (FLM): With respect to any lands in the United States, the Secretary of the Federal department with authority over such lands. Generally, the Secretaries delegate their authority to specific elements within each department. For example, the National Park Service and the Fish and Wildlife Service manage those areas under the authority of the Department of the Interior.

Fire Management Plan (FMP): A strategic plan that defines a program to manage wildland and prescribed fires, and documents the FMP to meet management objectives outlined in the approved resource management plan. The plan is supplemented by operational procedures such as preparedness plans, burn plans and prevention plans.

Fire-Dependent Ecosystem: A community of plants and animals that must experience recurring disturbances by fire in order to sustain its natural plant succession, structure and composition of vegetation, and maintain appropriate fuel loading and nutrient cycling to ensure proper ecosystem function.

Fire Use: The combination of wildland fire use and prescribed fire application to meet resource objectives.

Fireline: The part of a control line that is scraped or dug to mineral soil. Also called fire trail.

Fixed-Wing Aircraft: Floatplane or ski plane-configured aircraft.

Foam: The aerated solution created by forcing air into, or entraining air in water containing a foam concentrate by means of suitably designed equipment or by cascading it through the air at a high velocity. Foam reduces combustion by cooling, moistening and excluding oxygen.

Fuel: Includes combustible vegetative matter such as grass, trees, shrubs, limbs, branches, duff, and stumps.

Fugitive Dust: Particulate matter composed of soil, uncontaminated from pollutants, resulting from industrial activity. Fugitive dust may include emissions from haul roads, wind erosion of exposed soil surfaces, and other activities in which soil is either moved or redistributed.

General Management Plan (GMP): A document that sets forth a basic management philosophy and a framework for decision-making for each unit of the National Park System, such as Sleeping Bear Dunes National Lakeshore, for a period of 15-20 years.

Geological Formation: Layers of rock, deposited in the same geological age and forming a distinctive unit.

Groundwater: Water in the porous rocks and soils of the earth's crust; a large proportion of the total supply of fresh water.

Hardwoods: Broad-leaf trees that are usually deciduous and tend to have harder wood than conifers. Includes oaks, maples, hickories, ashes, birches, aspens, and poplars.

Hazardous Materials: Solid or liquid materials which may cause or contribute to mortality or serious illness by virtue of physical and chemical characteristics, or pose a hazard to human health or the environment when improperly managed, disposed of, treated, stored, or transported.

Hazardous Waste: A waste or combination of wastes which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may cause or significantly contribute to an increase in mortality or an increase in serious, irreversible illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Haze: An atmospheric aerosol of sufficient concentration to be visible. The particles are too small to see individually, but reduce visual range by scattering light.

Historic District: a geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites, landscapes, structures, or objects, united by past events or aesthetically by plan or physical developments.

Historic Property: As defined by the NHPA, a historic property or historic resource is any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP), including any artifacts, records, and remains that are related to and located in such properties. The term also includes properties of traditional religious and cultural importance (traditional cultural properties), which are eligible for inclusion in the NRHP as a result of their association with the cultural practices or beliefs of an Indian tribe or Native Hawaiian organization.

Intermittent Stream: A stream that flows only at certain times of the year when it receives water from rainfall, surface runoff, or springs.

Interpretation: A communication process designed to reveal meanings and relationships of cultural and natural heritage to the public through first-hand experiences with objects, artifacts, landscapes or sites; facilitating a connection between the interests of the visitor and the meaning of the park by explaining the park's purpose and significance; usually a single contact with a group or individual.

Inversion: A layer in the atmosphere where the temperature increases with altitude.

Land Use Plan: A broad scale, long range plan (e.g., forest plan, refuge plan or resource management plan) that identifies the scope of actions and goals for the land and resources administered by a land owner/manager.

Loam: A soil material which contains 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand.

Loess: Geological deposits of fairly uniform, fine material, mostly silt, that is presumably transported by wind.

Median Income: The amount which divides the income distribution of a given area into two equal groups, half having incomes above the median, half having incomes below the median.

Mitigation: A method or action to reduce or eliminate adverse program impacts.

Mobile sources: Moving objects that release pollution; mobile sources include cars, trucks, buses, planes, trains, motorcycles and gasoline-powered lawn mowers. Mobile sources are divided into two groups: road vehicles, which include cars, trucks and buses, and non-road vehicles that include trains, planes and lawn mowers.

Monitoring (monitor): Systematically observing, recording, or measuring some environmental attribute, such as air quality or water quality, or ascertaining compliance with a given law, regulation, or standard. For example, measurement of air pollution is referred to as monitoring. EPA, state and local agencies measure the types and amounts of pollutants in the ambient air. The 1990 Clean Air Act requires certain large polluters to perform enhanced monitoring to provide an accurate picture of how much pollution is being released into the air. The 1990 Clean Air Act requires states to monitor community air in polluted areas to check on whether the areas are being cleaned up according to schedules set out in the law.

Municipal: Belonging to a corporation or city.

National Environmental Policy Act (NEPA): Establishes procedures that Federal agencies must follow in making decisions on Federal actions that may impact the environment. Procedures include evaluation of environmental effects of proposed actions, and alternatives to proposed actions, involvement of the public and cooperating agencies.

National Ambient Air Quality Standards (NAAQS): Standards for maximum acceptable concentrations of “criteria” pollutants in the ambient air to protect public health with an adequate margin of safety (primary standard), and to protect public welfare from any known or anticipated adverse effects of such pollutants (e.g., visibility impairment, soiling, materials damage, etc.) in the ambient air (secondary standard).

National Historic Landmark (NHL): A special type of historic property designated because of its national importance in American history, architecture, archaeology, engineering, or culture. Section 800.10 of the Advisory Council on Historic Preservation’s regulations (36 CFR 800), as well as Section 110(f) of the National Historic Preservation Act, specify special protections for NHLs.

Natural Resources: Phenomena that occur in their natural state - wildlife, fisheries, water, forests, air, soils, minerals, etc.

Nonattainment Area: A geographic area that has been designated by the U.S. Environmental Protection Agency and the appropriate state air quality agency as exceeding one or more National Ambient Air Quality Standards. It has been estimated that 60% of Americans live in nonattainment areas.

Nonpoint Source: A source of pollution that is inherently diffuse or dispersed, such as land runoff, precipitation, atmospheric deposition, or percolation.

Nuisance Smoke: Amounts of smoke in the ambient air that interfere with a right or privilege common to members of the public, including the use or enjoyment of public or private resources.

Ozone: A gas that is a variety of oxygen. Ozone consists of three oxygen atoms stuck together into an ozone molecule. Ozone occurs in nature; it produces the pungent odor smelled near a lightning strike. High concentrations of ozone occur in a layer of the atmosphere – the stratosphere – high above the Earth. Stratospheric ozone shields the Earth from harmful rays from the sun, particularly ultraviolet B. Smog's main component is ozone; this ground-level or tropospheric ozone is a product of reactions among chemicals produced by burning coal, gasoline and other fuels, and chemicals found in products including solvents, paints, hair sprays, etc.

Parent Material: Disintegrated and partly weathered rock from which soils are formed.

Particulate Matter (PM): A mixture of very small particles that are suspended in the atmosphere, except uncombined water, which exists as a solid or liquid at standard conditions (e.g., dust, smoke, mist, fumes, or smog).

PM₁₀: Particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers (including PM_{2.5}). Concentrations in the air are measured as micrograms per cubic meter of air (ug/m³).

PM_{2.5}: Particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers. Concentrations in the air are measured as micrograms per cubic meter of air (ug/m³).

Perennial Stream: A stream that flows throughout the year.

Poverty: Per the Office of Management and Budget's Directive 14, the U.S. Census Bureau uses a set of money income thresholds that vary by family size and composition to detect who is poor. If a family's income is less than the threshold for that family, then that family, and every individual in it, is considered poor. Poverty thresholds do not vary geographically; however, they are updated annually for inflation with the Consumer Price Index. The official poverty definition counts money income before taxes and excludes capital gains and noncash benefits, such as housing, Medicaid, and food stamps.

Prescribed Fire: Any fire ignited by management actions to meet specific objectives (i.e., managed to achieve resource benefits).

Prescription: Measurable criteria that guide selection of appropriate management response and actions. Prescription criteria may include the meteorological conditions affecting the area under prescription, as well as factors related to the state of the area to be burned such as the fuel moisture condition and other physical parameters. Other criteria which may be considered include safety, economic, public health, environmental, geographic, administrative, social or legal considerations, and ecological and land use objectives.

Preservation: The act or process of applying measures necessary to sustain the existing form, integrity and materials of a historic structure, landscape, or object; generally is ongoing in nature involving repairs rather than extensive replacement and new work.

Proposed Wilderness: land recommended for designation as wilderness by Congress, based on a wilderness study submitted by a park or region, but which has not been approved by the Department and subsequently transmitted to Congress by the President; managed so as to not diminish wilderness characteristics (per NPS Management Policy).

Regional Haze: Generally, concentrations of fine particles in the atmosphere extending hundreds of miles across a region and causing deteriorated visibility conditions; wide-spread visibility impairment, especially in mandatory Class I Federal areas where visibility is an important value.

Resource Management Plan (RMP): A document prepared for a given unit of the National Park System, such as Sleeping Bear Dunes National Lakeshore, that sets forth goals, issues and strategies for the management, conservation and protection of natural and cultural resources at that unit.

Retardant: Any substance (except plain water) that by chemical or physical actions reduces flammability of fuels or slows their rate of combustion.

Runoff: Non-infiltrating water entering a stream or other conveyance channel during and shortly after a rainfall.

Scoping: Planning process that solicits people's and "stakeholders'" opinions on the value of a park, issues facing a park, and the future of a park. Also used in the NEPA process at the outset of preparing an EA or an EIS to help determine the scope of the study and the major issues that merit investigation and analysis.

Sensitive Populations: Those populations to whom smoke may present particular health risks

Sensitive Receptors: Locations where human population tend to concentrate and where smoke could impact the health of those population or significantly impact visibility that may be detrimental to either health or the enjoyment of scenic qualities of the landscape. These may be residential concentrations in the form of towns or cities, or locations where people tend gather in groups such as parks. Travel routes such as highways may be labeled as sensitive receptor sites where smoke can be a factor in potential motor vehicle accidents. Particular areas along highways or other locations may be more prone to being declared sensitive receptor sites because of topographic and microclimate features.

Silt: Fine sediment suspended in stagnant water or carried by moving water; it often accumulates on the bottom of streams and rivers.

Smoke Management Program: Establishes a basic framework of procedures and requirements for managing smoke from fires that are managed for resource benefits. The purposes of SMP's are to mitigate the nuisance and public safety hazards (e.g., on roadways and at airports) posed by smoke intrusions into populated areas; to prevent deterioration of air quality and NAAQS violations; and to address visibility impacts in mandatory Class I Federal areas in accordance with the regional haze rules.

Soil Association: A landscape, named for its major soil types, that has a distinctive proportional pattern of soils, generally consisting of one or more major soils and at least one minor soil type.

Soil Erosion: The removal and loss of soil by the action of water, ice, gravity, or wind.

Source: Any place or object from which pollutants are released. A source can be a power plant, factory, dry cleaning business, gas station or farm. Cars, trucks and other motor vehicles are sources, and consumer products and machines used in industry can be sources too. Sources that stay in one place are referred to as stationary sources; sources that move around, such as cars or planes, are called mobile sources.

Southern Transitional Boreal Forest: Mixed vegetation community areas of the park that lie between Great Lakes northern hardwood forests and conifer-dominated boreal forests to the north.

State Historic Preservation Officer (SHPO): The official within each state, authorized by the state at the request of the Secretary of the Interior, to act as a liaison for purposes of implementing the NHPA.

State Implementation Plan (SIP): A detailed description of the programs a state will use to carry out its responsibilities under the *Clean Air Act*. State implementation plans are collections of the regulations and emission reduction measures used by a state to reduce air pollution in order to attain and maintain NAAQS or to meet other requirements of the Act. The Clean Air Act requires that EPA approve each state implementation plan. Members of the public are given opportunities to participate in review and approval of state implementation plans.

Stationary Source: A place or object from which pollutants are released and which does not move around. Stationary sources include power plants, gas stations, incinerators, etc.

Suppression: A management action intended to protect identified values from a fire, extinguish a fire, or alter a fire's direction of spread.

Threatened Species: A species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Reservations of Use and Occupancy: Although exact conditions are somewhat different, rights to life or term estates not to exceed 25 years, are offered to owners of single family dwellings on which construction began before December 31, 1964, or which began on or after this date and before October 21, 1970. Provisions are made for terminating occupancy agreements if properties are needed for public use and development.

Tunnel Effect: Clearing vegetation and soil along a straight fireline that creates the appearance of a tunnel.

Violation of the PM NAAQS: As revised in 1997, the daily PM₁₀ standard is violated when the 99th percentile of the distribution of 24-hour concentrations for a period of 1 year (averaged over 3 calendar years) exceeds 150 µg/m³ at any monitor within an area. The annual PM₁₀ standard is violated when the arithmetic average of 24-hour concentrations for a period of 1 year (averaged over 3 calendar years) exceeds 50 µg/m³ at any monitor within an area. For PM_{2.5} the daily standard is violated when the 98th percentile of the distribution of the 24-hour concentrations for a period of 1 year (averaged over 3 calendar years) exceeds 65 µg/m³ at any monitor within an area. The annual standard is violated when the annual arithmetic mean of the 24-hour concentrations from a network of one or more population-oriented monitors (averaged over 3 calendar years) exceeds 15 µg/m³.

Visit: One person visiting a site or area for recreation purposes for any period of time.

Visitor Destination: Point of interest in the park established for day use visitation.

Volatile Organic Compounds (VOC's): Any organic compound that participates in atmospheric photochemical reactions. Some compounds are specifically listed as exempt due to

their having negligible photochemical reactivity. [See 40 CFR 51.100.] Photochemical reactions of VOC's with oxides of nitrogen and sulfur can produce O₃ and PM.

Wetlands: Areas that are inundated or saturated with surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil, including swamps, marshes, bogs, and other similar areas.

Wilderness: According to the Wilderness Act of 1964, "an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain." Furthermore, it "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable."

Wilderness Recommendation: The document resulting from the process to determine the suitability of all lands and waters within Sleeping Bear Dunes National Lakeshore for wilderness designation.

Wildfire: An unwanted wildland fire.

Wildland Fire: Any non-structural fire, other than prescribed fire, that occurs in a wildland.

Note: Wildland fires include unwanted (wild) fires and naturally-ignited fires that are managed within a prescription to achieve resource benefits.

Wildland Fire Suppression: An appropriate management response to wildland fire that results in the curtailment of fire spread and eliminates all identified threats from the particular fire. All wildland fire suppression activities provide for firefighter and public safety as the highest consideration, but minimize loss of resource values, economic expenditures, and/or the use of critical firefighting resources.

Wildland Fire Use: The management of naturally-ignited wildland fires to accomplish specific pre-stated resource management objectives in pre-defined geographic areas as outlined in fire management plans. Operational management is described in the Wildland Fire Implementation Plan (WFIP). Wildland fire use is not to be confused with "fire use," which is a broader term encompassing more than just wildland fires.

Wildland/Urban Interface: The line, area or zone where structures and other human development meet or intermingle with wildlands.

Wildland: An area where development is generally limited to infrequent roads, railroads, utility corridors, and widely-scattered structures. The land is not cultivated (i.e., the soil is disturbed less frequently than once in 10 years), is not fallow, and is not in the United States Department of Agriculture (USDA) Conservation Reserve Program. The land may be neglected altogether or managed for such purposes as wood or forage production, wildlife, recreation, wetlands or protective plant cover. It may be publicly or privately-owned.

APPENDIX C

ENVIRONMENTAL LAWS AND REGULATIONS

Relevant Laws and Regulations	Summary	Affected Resource(s)
National Environmental Policy Act (NEPA) (42 USC 4321-4370)	Requires Federal agencies to evaluate the environmental impacts of their actions and to integrate such evaluations into their decision-making processes.	All
Council on Environmental Quality (CEQ) Regulations	These regulations (40 CFR 1500-1508) implement NEPA and establish two different levels of environmental analysis: the environmental assessment (EA) and the environmental impact statement (EIS). An EA determines whether significant impacts may result from a proposed action. If significant impacts are identified, an EIS is required to provide the public with a detailed analysis of alternative actions, their impacts, and mitigation measures, if necessary.	All
Antiquities Act (AA) (16 USC 431 et seq.)	Authorizes the President to designate as national monuments any historic landmarks and historic and prehistoric sites, structures, and objects situated on Federal land. Establishes the requirement of a permit for the examination or excavation of such nationally important sites and establishes penalties for their destruction.	Cultural Resources
Archaeological Resources Protection Act (ARPA) (16 USC 470a et seq.)	Ensures the protection and preservation of archeological resources on Federal lands.	Cultural Resources
Clean Air Act (CAA) (42 USC 7401 et seq.)	Among its varied provisions, the CAA establishes standards for air quality in regard to the pollutants generated by internal combustion engines. These standards, known as the National Ambient Air Quality Standards (NAAQS), define the concentrations of these pollutants that are allowable in air to which the general public is exposed (“ambient air”).	Air Quality
Clean Water Act (CWA) (33 USC 1251 et seq.)	Section 401, the state water quality certification process, gives states the authority to grant, deny, or condition the issuance of Federal permits that may result in a discharge to the waters of the United States based on compliance with water quality standards. Section 404 regulates the discharge of pollutants, including dredged or fill material, into navigable waters of the U.S. through a permit system jointly administered by the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (USACE). Nonpoint sources requirements control pesticide runoff, forestry operations, and parking lots/motor pools. Point sources require individual or group permits and must be monitored at the point at which they enter public waters, storm sewers, or natural waterways. Section 311 (j) requires facilities to prepare a Spill Prevention Control and Countermeasure Plan, containing minimum prevention facilities, restraints against drainage, an oil spill contingency plan, etc.	Water Resources, Biological Resources

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 USC 9601 et seq.)	Provided broad Federal authority to respond directly to releases of hazardous materials that may endanger public health or the environment. Established prohibitions and requirements pertaining to closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when a responsible party cannot be identified.	Hazardous Materials
Endangered Species Act (ESA) (16 USC 1531-1544)	Prohibits the harming of any species listed by the U. S. Fish and Wildlife Service (USFWS) as being either Threatened or Endangered. Harming such species includes not only directly injuring or killing them, but also disrupting the habitat on which they depend.	Biological Resources
Federal Land Policy and Management Act (43 USC et seq.)	Declares that all public lands will be retained in federal ownership unless it is determined that a use other than public will better serve the interests of the nation. Requires that all public land be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, and environmental aspects of the land. Requires that all public lands and their resources be inventoried periodically and systematically.	All
Historic Sites Act (HSA) (16 USC 461 et seq.)	Authorizes the establishment of national historic sites, the preservation of areas of national interest, and the designation and the preservation of national historic landmarks (NHLs). Provides procedures for designation, acquisition, administration, and protection of such sites.	All
Migratory Bird Treaty Act (16 USC 703 et seq.)	Restricts the taking, possession, transportation, sale, purchase, importation, and exportation of migratory birds through permits issued by the USFWS.	Biological Resources
National Emissions Standards for Hazardous Air Pollutants (NESHAP)	Places standards on all hazardous air pollutants and governs such areas as organic liquids, asbestos, polyurethane foam, and wastewater. NESHAP is implemented under U.S. EPA jurisdiction.	Air Quality, Waste Management
National Historic Preservation Act (NHPA) (16 USC 470 et seq.)	Provides the framework for Federal review and protection of cultural resources, and ensures that they are considered during Federal project planning and execution. The implementing regulations for the Section 106 process (36 CFR Part 800) have been developed by the Advisory Council on Historic Preservation (ACHP). The Secretary of the Interior maintains a National Register of Historic Places (NRHP) and sets forth significance criteria for inclusion in the register. Cultural resources included in the NRHP, or determined eligible for inclusion, are considered “historic properties” for the purposes of consideration by Federal undertakings.	Cultural Resources

National Park Service Organic Act of 1916 (16 USC et seq.)	Established the National Park Service to manage national parks for the purposes of conserving the scenery, natural resources, historic objects, and wildlife within the parks, and providing for the enjoyment these resources in such manner that will leave them unimpaired for the enjoyment of future generations.	All
Native American Graves Protection and Repatriation Act (NAGPRA) (25 USC 3001 et seq.)	Protects Native American human remains, burials, and associated burial goods.	Cultural Resources
Resource Conservation and Recovery Act (RCRA) (42 USC 6901 et seq.)	Regulates all aspects of the handling of hazardous waste through RCRA permits issued by the U.S. EPA.	Hazardous Materials
Wilderness Act of 1964 (16 USC 1121 (note), 1131-1136)	Establishes the National Wilderness Preservation System. Wilderness defined as “an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain...which generally appears to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable.”	Wilderness
Executive Order 11514: Protection and Enhancement of Environmental Quality	Provides leadership for protecting and enhancing the quality of the Nation’s environment to sustain and enrich human life.	All
Executive Order 11593: Protection and Enhancement of the Cultural Environment	Provides leadership for protecting, enhancing, and maintaining the quality of the Nation’s historic and cultural environment.	Cultural Resources
Executive Order 12372: Intergovernmental Review of Federal Programs	Directs Federal agencies to consult with and solicit comments from state and local government officials whose jurisdictions would be affected by Federal actions.	All
Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations	Requires Federal actions to achieve Environmental Justice by identifying and addressing disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations.	All
Executive Order 13007: Protection and Accommodation of Access To "Indian Sacred Sites"	Directs Federal agencies to consider Indian sacred sites in planning agency activities.	Cultural Resources
Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks	Requires Federal actions and policies to identify and address disproportionately adverse risks to the health and safety of children.	All

Executive Order 11990: Protection of Wetlands	An overall wetlands policy for all agencies managing Federal lands, sponsoring Federal projects, or providing Federal funds to State or local projects. It requires Federal agencies to follow avoidance/mitigation/ preservation procedures with public input before proposing new construction projects.	Water Resources, Biological Resources
Executive Order 11988: Floodplain Management	Requires all Federal agencies to take action to reduce the risk of flood loss, to restore and preserve the natural and beneficial values served by floodplains, and to minimize the impact of floods on human safety, health, and welfare. Because many wetlands are located in floodplains, Executive Order 11988 has the secondary effect of protecting wetlands.	Water Resources, Biological Resources
Executive Order 12856: Federal Compliance With Right-to-Know Laws and Pollution Prevention Requirements	Requires that the head of each federal agency be responsible for ensuring that all necessary actions are taken for the prevention of pollution with respect to the agency's activities and facilities, and for ensuring that the agency complies with pollution prevention, emergency planning, and community right-to-know provisions.	Hazardous Materials